

improperly trench over into the fields of curative or personal health medicine?"

To answer those questions and many others of analogous import, which very properly could and should be asked would require a detailed study of the Health Department referred to, and at this time and in this place that is not possible. However, such questions and such studies should be made by the organized medical profession, for the protection of the interests of both the public and its own members; and the results of such careful surveys should be placed on record for both the profession and lay citizens.

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It may be stated that the auditor's report which is under discussion, shows a County Health Department personnel of 288 persons, the total salary appropriations amounting to \$172,078.00.

The activity divisions of the department include among others the following: administration; communicable diseases; vital statistics; quarantine; sanitation; milk; food; water; child hygiene; public nursing; school nursing; oral hygiene; fresh air schools; tuberculosis; immunization; laboratory; housing.

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One of the interesting expressions of this department's work is its cooperation with some twenty-five of the smaller municipalities of the county, giving each of these cities public health supervision and cooperation, the estimated cost usually being divided equally between each city and the county. The reason being to give a better public health service for the same amount of money.

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Another very interesting activity is the health centers, which are operated under the supervision of the County Health Department, in special buildings erected by the county, the medical and surgical work being under the control of an attending staff chosen from the physicians of each district. Here some new problems are being solved, but always with the thought in mind of full cooperation with the organized profession.

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From what has been here presented, it is evident that many interesting phases of the public health work of Los Angeles County might properly be discussed. On some future occasion this may be possible.

EPHEDRIN—A RECENT ADDITION TO WESTERN MEDICINE, BUT CENTURIES OLD TO THE CHINESE

Chinese herbs and Chinese herb doctors are no novelties to Californians.

True, the enforcement of the state medical practice act has eliminated the "Chinese doctor" pretense, so today the dispensers of the herbs

must be content to hold themselves out as merchants selling herbs, much as clerks in a modern drug store sell patent medicines. Then again, Chinese herb concoctions often have been far from palatable, and for that reason are usually as unattractive to Western eyes as are the dried fish and what-not imported food products so often on display in the grocery or food depots of a Chinatown district.

With an alien tongue, medicaments unpleasant to eye and palate, and a therapeutic system based on a philosophy and empiricism not readily understood by the Western brain, it is little wonder that practically all Chinese drugs and methods have been dismissed with little more than shrugs of the shoulders by Western physicians.

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Yet Chinese medicine goes back into a legendary period that antedates very considerably the earliest medical records of Westerns. Sheng Nung,¹ the Chinese father of medicine (B. C. 2737), is given credit for compiling the "Great Herbal." The Nei Ching or "Canon of Medicine" is supposed to have been written about B. C. 1000.

In the Tang dynasty, about A. D. 652, a book entitled "Thousand Gold Remedies" and consisting of sixty volumes appeared.

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A citation of some modern Western discoveries, in contrast with the Chinese may be of passing interest:

The catheter was mentioned by Chinese physicians in the seventh century A. D., although Western physicians place its discovery to the credit of Nelaton in 1860.

Organotherapy was early recorded in China, for sheep thyroid for goiter was used by the Chinese in the sixth century, A. D.

Inoculation against smallpox was used in China as early as 1022, A. D.

Chinese state medical schools and examinations are of record in 1068, A. D.

The foregoing notes are given because only recently K. K. Chen, Ph. D.,² a native of China and a former student of the University of Wisconsin Medical School, called the attention of Western physicians to Ma Huang, an herb known in Chinese medicine for some five thousand years, and the active principle of which is the alkaloid ephedrin.

Chen, after working out the active principle, found that a Japanese, Nagai, in 1887 had already accomplished this, and that E. Merck, in Germany, also reported the process in 1888.

Ephedrin is much like adrenalin in its chemical structure and in its action on the human tissues, and was discovered before adrenalin had been worked out. Strange to say, however, its significance had escaped the observation of Western clinical observers until Chen's presentation of its physiological action in December, 1924.

Here was a Chinese drug Ma Huang, used and understood by the Chinese for hundreds of years, with an alkaloid possessing distinct advantages.

¹ For an article on "China's Contribution to Medicine in the Past," see *Annals of Medical History*, Volume VIII, No. 2.

² The Action and Clinical Use of Ephedrin, *Journal A. M. A.*, September 11, 1926.

over adrenalin for certain purposes. In the last two years it has come into very generous use, particularly among rhinologists, and among internists paying special attention to asthma.

Ephedrin has a pharmacologic action much like that of adrenalin, but its effects last longer. It is more stable, and acts well when given by the mouth. It has a low toxicity. It shows active effects on the circulation, on secretion and on smooth muscle. It seemingly has no habit-forming tendency; and only a few distressing effects such as occasional tremor, weakness and nervousness have been observed.

It is especially valuable in bronchial asthma and of good use in certain congestions of the nasal membrane such as hay fever. Although it raises the blood pressure, its real clinical value in hypotension has not yet been agreed upon.

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The rediscovery of this drug known for centuries in the written records of the Chinese, and the recent reisolation of its alkaloid, ephedrin, which was originally isolated prior to adrenalin, and the tardiness in the recognition of its worth, shows how necessary it is to be on the alert for valuable agents and adjuncts in our therapy, even in this day when exploitation of new remedies is so general. We must acknowledge that a drug like ephedrin, antedating adrenalin and in many ways very similar in valuable action, seemed hardly to need the period from its original isolation in 1886 to its reisolation in 1924, to make Western medical men appreciate its worth. Chinese who appreciate how prone Westerners are to look upon the Chinese as one of the so-called backward peoples have seemingly in this instance, an opportunity to quietly smile in their sleeves at Western backwardness.

HONOR TO ALUMNI

Vanderbilt Hall, the new dormitory for the students of the Harvard Medical School was dedicated last month. The memory of former students whose names are known throughout the medical world is there perpetuated. The student room is named for Charles Best, co-discoverer of insulin with Banting; the dining hall for Bowditch; the living room for Mixter; and over forty of the students' suites for other illustrious alumni.

Thus the names will live. If to this could be added a memorial day when talks were given on the men so honored, perpetuation of the real personality would be effected. Surprising it is how few generations are necessary totally to erase the picture of one who was an inspiration to his own generation, beloved by his students, honored by his fellow practitioners, and the idol of his clientele.

If at every alumni meeting the life of a former colleague were read, the historical archives of the Association would shortly be complete. How much better such effort than the usual prophetic

and inane forecasting of the graduation class' future.

California has a Lane and a Barlow Library; she had a Toland Hall, but how few so honored compared with the many forgotten. Is it not time we followed the Harvard custom of immortalizing names?

The Best Method of Vaccination—The best method of vaccination is probably the "multiple pressure or prick" method. This consists of a shallow, tangential pricking of the cleansed, but not irritated, skin with a needle, through a drop of smallpox vaccine, covering an area not greater than one-eighth of an inch (3 millimeters) in diameter. This gives little chance of accidental infection and the eruption is typical. Acetone has been found satisfactory for cleansing the skin. It is somewhat more efficacious and rapidly drying than alcohol. The needle, which should be new, sharp, and sterile, is not thrust into the skin, but is held quite parallel or tangential to it, with the forefinger and middle finger of the right hand above the needle and the thumb below, the needle pointing to the operator's left. The needle should be crosswise of the arm so that the thumb of the operator is not impeded by hitting the skin. The side of the needle point is then pressed firmly and rapidly into the drop about thirty times within five seconds, the needle being lifted clear of the skin each time. This rapid to and fro motion of lifting the needle and pressing it against the skin should be quite perpendicular to the skin and needle, and not in the direction of the needle. In this way the elasticity of the skin will pull a fraction of an inch of the epidermis over the point of the needle at each pressure so that the vaccine is carried into the deeper epithelium (cuboidal prickle-cell layer), where multiplication takes place most easily. If the skin has not been unduly rubbed in cleansing, and if the motion is entirely perpendicular to the needle, no signs of bleeding will occur and all evidence of the punctures will fade out in less than six hours. Immediately after the punctures have been made the remaining vaccine is wiped off the skin with sterile gauze and the sleeve pulled down, the whole operation of puncturing and wiping taking less than ten seconds. With strong vaccine a single pressure not infrequently gives a "take." Only six pricks or punctures were formerly advocated. Comparative tests showed this to be inferior to the scratch method of percentage of "takes." By the use of thirty pricks this difficulty has been overcome, and the percentage of "takes" is as high as with any other safe method. For primary vaccinations, where the mildest possible "take" is desired, and where other attempts with highly potent vaccine will be made promptly if the first is unsuccessful, the number of "pricks" may be reduced to ten, or even to one.

The disadvantages of this method, which it shares with some other methods, are, first, that without demonstration and practice the technique of applying the proper pressure may not easily be acquired, and second, that without due care an area larger than one-eighth of an inch (3 millimeters) in diameter may be covered by the insertion. In regard to the first point, the difficulty is usually that the needle is not pressed in the right direction or that the pressure is not firm enough. Provided the needle is held quite tangential to the curve of the arm, and the direction of motion is quite perpendicular to the needle, it is difficult to make the rapid pressures too firmly. In regard to the second point, motion from the wrist with the arm held rigid is usually more accurate than whole-arm motion.

The advantages of this method are its mildness and painlessness, the fact that it is more rapid than any other effectual and safe method, the fact that no control site is necessary, since the evidence of trauma due to the operation has disappeared before the first observation for an early reaction is made, and the fact that the vaccine is wiped off immediately, so that the uselessness of a dressing is obvious to the person vaccinated.—*Ohio Health News*.